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Saskatchewan Immunization Manual Amendments Jan. 2018

Instructions: Please remove and discard the corresponding pages in each chapter section and insert the amended pages as noted below in each corresponding chapter section dated January 2018.

Chapter 1 Introduction

- P. 12 – Updates made re: Tdap for pregnant women and Tdap-IPV for school entry booster.
- P. 13 – Updates to HPV section.
- P. 14 – Children with HIV eligible for Men-C-ACYW-135 vaccine.

Chapter 5 – Immunization Schedules

- P. 1 – Section 1 Routine Imms Schedules for Infants, Children and Adolescents
  - Men-C-ACYW-135 and HPV-9 indicated for special populations.
  - Footnote #3 now states, "People born since Jan. 1/82 who live in the Athabasca Health Authority or on reserves in Saskatchewan (excluding Creighton, Air Ronge and La Ronge) regardless of where they access immunization services.
  - Footnote 7 now states, Tdap can be administered any time (e.g., the next day) after a tetanus-diphtheria toxoid–containing vaccine was given.
- P. 5 - Section 1.4
  - Footnote #3 now states, "People born since Jan. 1/82 who live in the Athabasca Health Authority or on reserves in Saskatchewan (excluding Creighton, Air Ronge and La Ronge) regardless of where they access immunization services.
- P. 6 - Section 1.5
  - HPV-9 indicated for special populations.
  - Footnote 6 now states, "Self-reported varicella disease after 1 year of age is only acceptable as…"
  - Footnote 7 now states, "One dose for those born since January 1, 1993 to September 30, 2000 who are not in Grade 6."
  - Min. age 9 years old added to footnote 10.
  - Footnote #12 now states, "People born since Jan. 1/82 who live in the Athabasca Health Authority or on reserves in Saskatchewan (excluding Creighton, Air Ronge and La Ronge) regardless of where they access immunization services.
- P. 7 – Section 1.6
  - HPV-9 indicated for special populations.
  - Under footnote 5 Varicella susceptibility, the note now states, "NOTE: Verbal history of disease after 1 year of age is generally accepted as evidence of immunity for persons born before January 1, 2003.
  - Footnote 9 now states, "One dose for healthy adults 65 years and older; if they received a dose before 65 years old, they cannot get another dose."
  - Previous footnote 10 re: LAIV and contraindicated populations removed.
  - Footnote # 10 now states, "People born since Jan. 1/82 who live in the Athabasca Health Authority or on reserves in Saskatchewan (excluding Creighton, Air Ronge and La Ronge) regardless of where they access immunization services.
- P. 8 – Section 1.7
  - New bullet added for Td (or Tdap) row - Tdap can be given any time after Td if required (e.g., the next day).
- P. 9 – Section 1.8
  - New! Vaccines for individuals with specific high-risk medical conditions are all marked with *.
- P. 11 – Section 2.1 Minimum Intervals
  - Minimum ages added to several vaccines.
  - Minimum intervals for the 4-dose Bexsero schedule corrected.
  - Footnote 11 added to 3 dose HPV series.

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P. 15 Section 3.5.1
- Doses/intervals corrected for CMVIg, IVIg and packed red blood cells as per CIG.

P. 17 – Section 3.7.2
- Tetanus table revised for time since last dose given.

Chapter 6 Contraindications and Precautions

- Pp. 2-3 – Section 2.1 and Section 2.2
  - Section amended to align with CIG, please review as format has been updated.

Chapter 7 Immunization of Special Populations

- P. 10 Section 2.10 Malignancies/Cancer
  - New bullet added to this section - *Please note that individuals who present as 'cancer-free' in the future do not qualify for additional vaccine doses (i.e., a second dose of Pneu-P-23) as their risk is the same as everyone else.
- P. 14 section 3.2A Immunocompromised Conditions
  - Detailed HPV-9 eligibility added to table.
- P. 16 Section 3.3A HIV
  - Detailed HPV-9 eligibility added to table.
  - Men-C-ACYW-135 added to table for children 2 months to 17 years inclusive.
  - Men-C-ACYW-135 to replace routine Men-C-C at 12 months of age.
- P. 19 Section 3.7 Medical Treatment
  - Section rewritten and formatted for inactivated and live vaccine recommendations.
- P. 20 Section 3.7A Medical Treatment
  - Detailed HPV-9 eligibility added to table.
- P. 21 Section 4.0 Post –exposure
  - Third sentence of first paragraph now states: "*If she is HBsAg is positive **or** has an unknown status but …*"
- Pp. 33-34 Appendix 7.1 both pages
  - HPV added to specific immunocompromised conditions. Footnote #10 removed from HIV and page 34.
  - Men-C-ACYW-135 added to HIV with footnote #9 indicating that this is for children only.
- P. 37 Appendix 7.4
  - Algorithm updated for dosing and scheduling of both vaccines for renal clients.

Chapter 10 Biological Products

- Table of Contents
  - Page 2 – Trumenba added under Meningococcal B Vaccine
  - Page 3 - Td Adsorbed moved here from page 2
- PEDIACEL®
  - Added to footnote #1: Minimum age is 6 weeks.
- Publicly Funded Hepatitis A (HA) Vaccine Indications
  - Bullet 1 now states, "People born since Jan. 1/82 who live in the Athabasca Health Authority or on reserves in Saskatchewan (excluding Creighton, Air Ronge and La Ronge) regardless of where they access immunization services."
- Publicly Funded Hepatitis B (HB) Vaccine Indications
  - Updated bullet:
    - Household/sexual/close contacts of individuals who have an acute or chronic HB infection [6].
      - Includes children in a child care setting in which there is an HB infected individual.

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- ENGERIX®-B and RECOMBIVAX HB® have updated pediatric scheduling:
  - 0.5 ml IM (10 mcg) at 0, 1 and 6 months[5] or 2, 4 and 6 months[5]

- GARDASIL®9
  - Detailed HPV-9 eligibility added to table.
- Immunization Recommendations for Children 4-6 years of Age
  - Footnotes 1, 2 and 3 revised. New footnotes 4, 5 and 6 added.
- All Men-C-ACYW-135 vaccines (Menactra, Menveo and Nimenrix) have new additions:
  - New eligibility bullet: HIV – ONLY for children up to and including 17 years of age.
  - New footnote #6 - 6 Patients being treated with SOLIRIS (eculizumab) are at high risk for Invasive Meningococcal Disease despite being immunized with meningococcal vaccines (CDC, 2017, https://www.cdc.gov/mmwr/volumes/66/wr/mm6627e1.htm?s_cid=mm6627e1_e).
- BEXSERO
  - (4 week intervals) added to sub-bullet of 3-dose series bullet for infants 2-5 months old.
  - New footnotes added:
    1. Patients being treated with SOLIRIS (eculizumab) are at high risk for Invasive Meningococcal Disease despite being immunized with meningococcal vaccines (CDC, 2017, https://www.cdc.gov/mmwr/volumes/66/wr/mm6627e1.htm?s_cid=mm6627e1_e).
    2. An increased risk of hemolysis or low hemoglobin has been observed when patients already being treated with SOLIRIS (eculizumab) get vaccinated against serogroup B meningococcal infection with Bexsero® (Alexion Pharma Canada, 2017).
- Prevnar 13
  - Page 1 - Minimum age 6 weeks old added under indications.
  - Page 2 – Footnote #5 now states, "…for specific medical condition recommendations and age restrictions. Medical high-risk…"
- PNEUMOVAX® 23
  - New footnote #5 added second page that applies to malignancies/cancer - [5] Individuals who are 'cancer-free' do not qualify for additional vaccine doses (i.e., a second dose of Pneu-P-23) as their risk is the same as everyone else.
- ROTARIX™
  - Minimum age of 6 weeks noted.
  - New bullet on both pages re: NG tubes - **NOTE:** The manufacturer has not addressed if Rotarix™ be given via g-tube but the CDC considers administration of rotavirus vaccine via g-tube to be an acceptable practice. Ensure the g-tube is flushed after Rotarix™ has been administered (http://www.immunize.org/askexperts/experts_rota.asp).
- Adacel, Boostrix, Adacel-Polio and Boostrix-Polio
  - Minimum age of 4 years old is specified for these vaccines.
- VARILRIX® (both pages) and VARIVAX® III (page 1)
  - Third bullet under footnote 1 now states, *NOTE: verbal history of disease before 1 year of age is unacceptable evidence of immunity for those born since Jan. 1, 2003*.
- HepaGam B® (page 2) and HyperHEP B® S/D (page 2)
  - Bullet 4 – 5th sentence now states, *For sexual exposures, …* (Percutaneous has been removed)
- Updated product monographs:
  ACT-HIB MENJUGATE® and MENJUGATE® Liquid Trumenba™ SYNFLORIX™ VARILRIX® YF-VAX®

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Instructions: Please remove and discard the corresponding pages in each chapter section and insert the amended pages as noted below in each corresponding chapter section dated March 2018.

Chapter 1 Introduction

- p. 7 Table 1: Evidence-Based Strategies to Improve Vaccine Uptake
  - Column 3 bullet 11 – RHA changed to SHA/AHA.
- P. 11 Section 5.1 School Immunization Programs
  - Date of 2-dose series corrected to 2015-16.
- P. 12 Section 5.2 History of Publicly Funded Immunizations and Programs in Saskatchewan
  - Column 3 last row of DTPIPV vaccines now reads - All pregnant women offered Tdap (usually at 27 weeks gestation).

Chapter 2 – Authorization to Immunize

- P. 1 Section 1.1 Authorization to Immunize
  - First bullet now reads "The Athabasca Health Authority (AHA), the Saskatchewan Health Authority (SHA) and First Nations Jurisdictions (FNJs), as employers…
  - Third bullet now reads "The designated AHA, SHA or FNJ Medical Health Officer…

Chapter 3 – Informed Consent

- P. 9 SIMS changed to Panorama

Chapter 5 – Immunization Schedules

- TOC first page
  - Section 3.7.2 retitled to Guide to Tetanus Prophylaxis in Wound Management
- P. 1 – Section 1.1 Routine Immunization Schedule for Infants, Children and Adolescents
  - Update to schedule to include Rot-5, even though vaccine administration is applicable to those born since April 1, 2018. Footnote #10 now states "First dose must be given by 14 weeks 6 days of age; last dose must be given by 8 months 0 days. Rot-1 2-dose series, Rot-5 3-dose series".
  - Footnote 11 now states, Females born since January 1, 1996 & males who are currently in grade 6 OR males born since Jan. 1, 2006 or males who did not receive or complete series when in grade 6 (2017/18 school year start date) until 27 years old. Min age 9 years old. Refer to 2.1 Minimum Intervals for Specific Vaccine Series for age-specific interval and dose requirements.
- P. 6 Section 1.5 Children 7 to 17 Years Who Present for Immunizations
  - HPV-9 Footnote #10 now states "Females born since January 1, 1996 & males who are currently in grade 6 OR males born since Jan. 1, 2006 or males who did not receive or complete series when in grade 6 (2017/18 school year start date) until 27 years old. Min age 9 years old. Refer to 2.1 Minimum Intervals for Specific Vaccine Series for age-specific interval and dose requirements.
- P. 7 Section 1.6 Adults 18 Years and Older Who Present for Immunizations
  - Footnote #1 now states "Adults eligible to complete 3-dose IPV series (see p. 21). Booster doses of IPV are not publicly funded."
  - Men-C-ACYW-136 added to table, thus new footnote #7 "For individuals born since January 1, 2000 up to and including 21 years of age; ineligible for vaccine upon 22nd birthday".
- P. 11 Section 2.1 Minimum Intervals for Specific Vaccine Series
  - Footnote #11 added to 3-dose HPV-9.
- P. 17 Section 3.7.2 Guide to Tetanus Prophylaxis in Wound Management
  - Table revised as per CIG.
  - New footnote #5 added re: time recommendation for TIg administration.
- P. 21 Section 4.1 Unknown or Uncertain Immunization Status
  - Re: MMR immunization, bullet now states "Measles, Mumps, Rubella – see Appendix 5.2: Adult Eligibility for Publicly Funded MMR Vaccine."

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Chapter 7 Immunization of Special Populations

- P. 23 Section 5.2.A: Publicly Funded Vaccines – Pregnancy
  - All new bullets in the Tdap row:
    - Offered Tdap at or after 27 weeks gestation (CIG, NACI).
    - If Tdap is administered to a pregnant woman **before** 27 weeks gestation, **she does not need another Tdap after 27 weeks gestation or post-delivery.**
    - A Tdap vaccine should be routinely offered to all pregnant women in every pregnancy, irrespective of their immunization history. One dose of Tdap vaccine should ideally be provided between 27 and 32 weeks of gestation. Earlier immunization between 13 and 26 weeks of gestation may also be considered in some situations (e.g. in case of an increased risk of preterm delivery or travel) to allow for longer placental exposure to higher antibody levels and maximization of antibody transfer. While it is preferable that immunization is administered at least 4 weeks before birth to allow optimal transfer of antibodies and direct protection of the infant against pertussis, it should be considered until the end of pregnancy as it has the potential to provide partial protection.
    - Women who previously received Tdap anytime as an adult or during their current pregnancy do not require Tdap post-delivery.
- P. 40 Appendix 7.7: Tdap Immunization Decision Chart for Pregnant Women
  - Pregnancy and Tdap decision tool updated.
- P. 41 Appendix 7.8: Publicly Funded Immigrant and Refugee Immunization and Serology Recommendations
  - Refer to Publicly Funded HA Vaccine Indications added to HA row for children and adults.

Chapter 10 Biological Products

- Table of Contents (first page)
  - Herpes Zoster vaccines – separate brands and abbreviations noted for both vaccines.
- Recombivax HB
  - Pediatric strength corrected to 5 mcg.
- Gardasil 9
  - Male indication updated: Males who are currently in Grade 6 OR males born since Jan. 1, 2006 or males who did not receive or complete series when in Grade 6 (2017/18 school year start date).
- Immunization Recommendations for Children 4-6 years of Age
  - Footnote #7 added, as missed on last update. States "If a child younger than 7 has received a Tdap-IPV for any of the first four doses of the tetanus-containing vaccines, provide another dose of DTaP-IPV Hib at appropriate interval, for optimum protection. (Rationale is the child did not receive sufficient diphtheria or pertussis antigen amount with Tdap-IPV)".
- For Men-C-ACYW-135 vaccines (Menactra, Menveo and Nimenrix first pages)
  - Reinforcement dose recommendation for those immunized at 6 or younger now states "If first dose received at age ≤ 6 years → A booster dose should be given every 3 to 5 years" (as per CIG)
- Bexsero (page 1 of 2)
  - Bullet under Infants aged 2 months through 5 months now states "3-dose primary series: 0.5 mL IM at 2 months, 4 months and 6 months of age followed by a 4th dose after 12 months of age.
- Pneumovax 23 (page 1 of 2)
  - Updated indication bullet: malignancies/cancer **(individual must currently have**)
- Rotarix (both pages)
  - New footnote #8 added, stating "Additional teaching/supplies/policy should be available to PHNs before administer via this route (i.e., checking NG tube placement and flushing post administration)."
- NEW! RotaTeq® is a new publicly funded vaccine.
  - Please ensure staff review both pages.

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- Varilrix and Varivax (page 1 of both)
    - Third bullet under varicella susceptibility now states, NOTE: verbal history of disease is unacceptable evidence of immunity for those born since Jan. 1, 2003.
- **Product monograph updates:** INFANRIX hexa®

Chapter 11 – Adverse Events Following Immunization

- Pp. 14-15 Appendix 11.5: Canadian Biological Product Abbreviations
    - RZV and LZV added to table, ZOS removed.
    - Rot-1 and Rot-5 rows are separated.

Chapter 14 Appendices

- P. 21 Appendix 14.3: Immunization Fact Sheets
    - Vaccine Options to Protect Your Child From Measles, Mumps, Rubella and Varicella added to table.
    - Rotavirus Vaccine (April 2018) added to table.

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Saskatchewan Immunization Manual Amendments May 2018

Instructions: Please remove and discard the corresponding pages in each chapter section and insert the amended pages as noted below in each corresponding chapter section dated May 2018.

Chapter 1 Introduction

- P. 11 Section 5.1 School Immunization Programs
  - HB- second row date for 2-dose series is 2005/06-2009/10
  - HPV - date of 2-dose series corrected to 2015/16.
- P. 12 and P. 14 Section 5.2 Hx of PF Vaccines and programs in SK
  - May 2018 OPV doses received as of April 1, 2016 replaced with IPV as per age requirements.
  - RotaTeq® (Rot-5) added for infants born as of April 1/18.

Chapter 5 – Immunization Schedules

- ToC second page
  - New Appendix 5.5 ROTAVIRUS VACCINE ELIGIBILITY DATES added.
- P. 5 Section 1.4 Children 1 Year and Older but less than 7 Years Who Present for Immunizations
  - New sentence added to bullet * added that may pertain to a child's 3rd DTaP or Tdap-IPV dose containing vaccine dose: " If the child's third dose is received between 4-6 years, a 4th dose should be given at least 24 weeks later."
  - MMRV interval moved to 1 month after 1st dose.
- P. 6 Section 1.5 Children 7 to 17 Years Who Present for Immunizations
  - Bullet* last sentence now reads, "They are considered up to date if the 3rd Tdap dose was given ≥ 7 years of age but may receive another Tdap before 11-13 years of age (Routine Grade 8 dose) at the PHN's discretion."
  - Footnote #8 now reads, "Men-C-C will forecast as overdue for a child until they become 10 years old. At 10 years old, Men-C-ACYW-135 automatically forecasts as part of the Grade 6 program eligibility and Men-C-C disappears from the forecast. The child remains eligible to receive the Men-C-C vaccine if they present before starting Grade 6".
- P. 11 Section 2.1 Minimum Intervals for Specific Vaccine Series
  - RotaTeq added.
  - **New!** Footnote 13 states, "Max age of 8 months – 1 day" for rota vaccines.
- **New!** P. 31 Appendix 5.5 ROTAVIRUS VACCINE ELIGIBILITY DATES
  - Quick reference for first and final dose eligibility parameters.

Chapter 7 Immunization of Special Populations

- P. 21 Section 4.0 POST-EXPOSURE
  - First 3 sentences in first paragraph now read, "Infants born to mothers who are HBsAg positive during pregnancy have a risk of contracting HB infection. Without intervention, this risk is estimated to be 90% if the mother is HBsAg positive and 5-20% if the mother is HBsAg negative. Infants who contract HB infection have a 90-95% risk of developing chronic HB infection potentially leading to cirrhosis and hepatocellular carcinoma".

Chapter 10 Biological Products

- Recombivax HB and Engerix B vaccines
  - Series statement now reads, "…or refer to minimum intervals in Ch. 5."
- Gardasil 9
  - New indication added (was missed earlier): Immunocompromised females and males aged 9 up to and including 26 years of age (ineligible at 27th birthday).
- Menactra, Menveo and Nimenrix vaccines
  - '(except for Grade 6 program')' added to all under series based on age at presentation row.

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- Imovax Polio
  - NEW! New note under indications: NOTE: IPV is to replace OPV doses (for age requirements) documented as of April 1, 2016.
- Rotarix and RotaTeq vaccines
  - Dose 2 bullet now reads as, "Dose 2 must be received by 8 mo. – 1 d".
  - Footnote #6 last sentence now reads as, "if any dose in the series was RotaTeq®, a total of 3 doses of rotavirus vaccine should be administered provided the age limit of 8 months minus 1 day is not exceeded."
- Adacel and Boostrix vaccines
  - Footnote #11 now reads, "Pregnant women: Tdap in every pregnancy, ideally between 27-32 weeks gestation'.
- **Product monograph or product monograph link updates:**

INFANRIX hexa® HIBERIX® VAQTA® RECOMBIVAX HB® ZOSTAVAX ® II Gardasil Gardasil 9 M-M-R® II ProQuad™ Nimenrix Trumenba Pneumovax 23 RabAvert Rotarix RotaTeq Varivax III HepaGam B Gama STAN S/D VariZIg

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Instructions: Please remove and discard the corresponding pages in each chapter section and insert the amended pages as noted below in each corresponding chapter section dated June 2018.

Chapter 1 Introduction

- P. P. 14 Section 5.2 Hx of PF Vaccines and programs in SK
  - Revision to meningococcal vaccines

October 2004	Meningococcal conjugate C (Men-C-C) routine for: • All children at 12 months of age born since October 1, 2003 • Preschool catch-up for children born since October 1, 2000 • Grade 6 students born January 1, 1993 to Dec. 31, 1999
Sept. 2011	• Meningococcal conjugate ACYW-135 for Grade 6 students born since January 1, 2000. • Menveo® approved for children ≥ 2 months of age for outbreaks

  - o

Chapter 5 – Immunization Schedules

- P. 6 Section 1.5 Children 7 to 17 Years Who Present for Immunizations
  - New! Footnote * now states: **Refer to SIM Ch. 10 Tdap (Adacel and Boostrix) and Tdap-IPV (Adacel-Polio and Boostrix-Polio) pages for directives in completing all series, based on immunization status and/or age when first dose of a DTaP-containing vaccine was received (e.g., before or after 1 year old).**
  - Footnote #7 now reads, "Grade 6 students can receive Men-C-ACYW-135 a minimum of 4 weeks after a previous Men-C-C vaccine and 3 or more years after previous Men-C-ACYW-135 dose.
  - Last sentence removed from footnote 8.
- P. 27 Appendix 5.2: Adult Eligibility for Publicly Funded MMR Vaccine
  - New! Bullet added in bottom text box: Although a second dose of rubella is not considered necessary for immunity, it is not harmful and may benefit the 1% to 5% of people who do not respond to primary immunization (CIG).

Chapter 7 Immunization of Special Populations

- TOC (2nd page) update to reflect changes below.
- P. 26 Section 6.3 retitled as: Publicly Funded Vaccines - Healthcare – AHA/SHA/SCA/CC/FNJ Workers and Students
- P. 27 Section 6.5 Publicly Funded Vaccines - Healthcare – AHA/SHA/SCA/CC/FNJ Workers and Students
  - New! Note added to Rubella row: NOTE: Although a second dose of rubella is not considered necessary for immunity, it is not harmful and may benefit the 1% to 5% of people who do not respond to primary immunization (CIG)" for clarification.

Chapter 8 – Administration of Biological Products

- TOC both pages updated to reflect new content sections as noted below.
- P. 1 Section 1.1.1 General Screening questions
  - New question added as #9: Is there a history of severe combined immunodeficiency (SCID) or a history of recurrent, unexplained early deaths in the family?
- P. 2 Section 1.3 Product Preparation
  - New sections!
    - Section 1.3.1.1 Filter Needles
    - Section 1.3.1.2 Combination of Contents of Multi-Dose Vials
- P. 5 Section 1.3.5 Ampoules
  - Sub-section a removed under #5 as now under section 1.3.2.
- P. 8 Section 2.1.1 Limb Integrity
  - Section updated as per CIG 2017.
- P. 26 Section 3.3 Evidence-Based Interventions for Pain and Anxiety
  - New! CIG resource for pain reduction all ages is noted.

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- P. 29 Post-Immunization Client Care
  - #2 Updated:

    Prophylactic administration of acetaminophen prior to or immediately post-immunization for pain management is ineffective and is not recommended because of interference with vaccine induced immune responses. The March 2018 *Peadiatrics and Child Health* article **Fever prophylaxis can reduce vaccine responses: A caution** states:

    > "Prophylactic use of antipyretic/analgesic drugs can reduce immune responses to some infant vaccines, warranting judicious use. The clinical significance of such reduced responses is uncertain but stronger responses are obtained in the absence of prophylaxis. In contrast, using these drugs to treat symptoms once they appear is unlikely to interfere with immune responses and would reduce the number of asymptomatic children exposed to other potential drug adverse effects. The above observations that anti-inflammatory drugs only interfere with antibody responses if present during the first 6 to 8 hours after immunization serve as a reminder that injection site inflammation is an essential first step in initiating responses to vaccines, activating dendritic cells and recruiting macrophages that rapidly transport vaccine antigens to regional lymph nodes where antibody responses begin. Acetaminophen and ibuprophen target different parts of the inflammatory response cascade, likely explaining their differing effects on immune responses."
- Pp. 30-31 Section 4.0 References
  - Updated.
- P. 34 New! Appendix 8.3: Immunization pain management strategies, by age group (CIG)

Chapter 10 Biological Products

- ToC first page updated
- New! Hepatitis B Series Completion Recommendations for Children Presenting at 11-15 Years Old (applies to those 10 years in Grade 6)
  - Includes SCOI recommendations to complete the HB schedules of those with a history of previous HB or HAHB vaccines.
- Hepatitis B Completion Scenarios (excluding children 11-15 years old)
  - Has been revised, replacing client for child or adult; and
  - Previous scenarios for clients presenting between 11-15 years have been removed as now addressed in separate new section as noted in previous bullet.
- MMR II and Priorix (2nd pages of both vaccines)
  - Footnote 1 now states: Travelling infants 6 months to younger than 12 months of age should be offered an early publicly funded dose of MMR vaccine if they are travelling to:
    - Countries outside of North America; **or**
    - Mass gatherings (generally defined of ≥ 25,000 people according to the WHO) of international travellers (e.g. sporting events, pilgrimages, etc.) anywhere in the world.
- Inactivated Polio Vaccine
  - Intervals now state months instead of weeks.
- RotaTeq
  - Revised Contraindication: Infants diagnosed with Severe Combined Immunodeficiency (SCID) disorder or who have a family history of SCID or recurrent, unexplained early deaths in the family.
- Attention: Adacel and Boostrix
  - Complete reformatting of indications, doses and formatting, including requirements for children 7-17 who have/have not received a dose of a DTaP-containing vaccine before/after 1 year old.
  - All footnotes revised as well.
  - **Please ensure all staff are familiar with the revisions!**
- Attention: Adacel-Polio and Boostrix-Polio

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  - Complete reformatting of indications, doses and formatting, including requirements for children 7-17 who have/have not received a dose of a DTaP-containing vaccine before/after 1 year old.
  - All footnotes revised as well.
  - **Please ensure all staff are familiar with the revisions!**
- Tubersol
  - TB Prevention and Control Policy for Diagnosis now referenced under indications.
- HYPERTET® S/D (page 1)
  - 30 days deleted from 2nd bullet under DOSE/SERIES and replaced with approximately 28 days based on TIg half-life of 3.5-4.5 weeks (ImmunoFacts, 2013).

Chapter 14 Appendices

- TOC updated
  - New section! Select Immunization-Related Letters From The Ministry Of Health
- New! Starting on page 23, a new section titled Select Immunization-Related Letters from the Ministry of Health will be a reference area for selected immunization-related letters for ease of reader access. 3 letters from 2018 have been posted:
  - Immunization with Tdap in every pregnancy (March 22/18)
  - New Rotavirus Vaccine Implementation – RotaTeq (March 29, 2018)
  - Re-immunization Directive – Oral Polio Vaccine Doses Documented as of April 1, 2016 (May 15/18)

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Instructions: Please remove and discard the corresponding pages in each chapter section and insert the amended pages as noted below in each corresponding chapter section dated August 2018.

Chapter 5 – Immunization Schedules

- P. 1 Section 1.1 Routine Immunization Schedule for Infants, Children and Adolescents
  - Added to first bullet, "and Chapter 7 *Special Populations* for vaccine eligibility".
  - HA indicated with ●
  - ♦ removed from Pneu-C-13, Men-C-ACYW-135, HPV-9
- P. 5 Section 1.4 Children 1 Year and Older but less than 7 Years Who Present for Immunizations
  - Added to first bullet, "and Chapter 7 *Special Populations* for vaccine eligibility".
  - HA indicated with ●
  - Pneu-P-23 deleted from table.
  - ♦ removed from Pneu-C-13
  - Old footnotes # 9 and #10 deleted from table
  - Old footnotes #11 and #12 are now new footnotes #9 and #10
- P. 6 Section 1.5 Children 7 to 17 Years Who Present for Immunizations
  - Added to first bullet, "and Chapter 7 *Special Populations* for vaccine eligibility".
  - HA indicated with ●
  - Pneu-P-23 and Pneu-C-13 deleted from table
  - Old footnotes #13 and #14 deleted
  - Old footnote # 15 is now new footnote #13
- P. 7 Section 1.6 Adults 18 Years and Older Who Present for Immunizations
  - Added to first bullet, "and Chapter 7 *Special Populations* for vaccine eligibility".
  - Td-IPV removed will no longer available
  - ● added 2x under IPV
  - Footnote #1 removed from Td/Td-IPV column
  - HA and HPV-9 indicated with ●
  - #10 is now first original sentence. Immunizers are directed to Ch. 7 & 10 to determine eligibility for doses before 65 or for second dose.
- P. 17 section 3.7.2 Guide to Tetanus Prophylaxis in Wound Management
  - Added to footnote #1 - Tdap/Tdap-IPV is preferentially recommended for those 7-17 years who are not up to date with polio and/or pertussis vaccines.
- P. 30 Appendix 5.4 Publicly Funded Varicella Immunization Eligibility and Panorama Directives
  - Red asterisk * now placed in second row of columns 2 and 3. Removed from first column row 4 and 5.
  - Red asterisk * sentence now reads, *Refer to Chapter 7, Special Populations for details re: Women of childbearing age who have documentation of previously receiving only one dose of varicella containing vaccine may be eligible to receive a publically funded second dose based on documented serological immunity.

Chapter 6 Contraindication and Precautions

- P. 5 Section 4.1 Antibiotics and Antivirals – last 3 bullets revised
  - Systemic antiviral therapy (e.g., acyclovir, valacyclovir, famciclovir) should be avoided for 24 hours as it may affect the reproduction of and reduce the efficacy of a live varicella-containing vaccine or a live zoster vaccine (CIG)
  - On the basis of expert opinion, it is recommended that people taking long-term antiviral therapy should discontinue these drugs, if possible, from at least 24 hours before administration of a live varicella-containing vaccine or a live zoster vaccine, and should not restart antiviral therapy until 14 days after vaccine administration (CIG).

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- LAIV should not be administered until 48 hours after antiviral agents active against influenza (e.g., oseltamivir and zanamivir) are stopped, and antiviral agents should not be administered until at least 14 days after receipt of LAIV unless medically indicated. If antiviral agents are administered within this time frame (from 48 hours before to 14 days after LAIV), revaccination should take place at least 48 hours after the antivirals are stopped.

Chapter 7 Special Populations

- P. 35 Appendix 7.2 Varicella Immunization of Immunocompromised Clients Requires Physician Approval
  - Footnote #2: now states, "persons ≥ 1 year old.

Chapter 9 Management of Biological Products

- ToC pages 1 and 2
  - SDCL removed from 3.2.3
  - 'Form' added to 5.2, 5.3 and 5.6.
  - New ! Visual tools added – refer to 5.3A and 5.4A
  - Page numbers updated on second page.
- Pp. 12-14, 17-20, 22 and 27-33
  - Saskatchewan Disease Control Lab and SDCL changed to Row Romanow Provincial Laboratory (RRPL)
- Pp. 27-28 Section 5.2 Cold Chain Report Form – updated
- P. 29 Section 5.2 A How to Complete the Cold Chain Break Report Form – updated
- P. 30 Section 5.3 Products Wastage Report Form –updated
- P. 31 New! Section 5.3A Product Wastage Reporting Form Visual Tool
- P. 32 Section 5.4 Vaccine Returns Form – updated
- P. 33 New! Section 5.4A Vaccine Product Returns Form Visual Tool
- Sections 5.5 – 7.0 page numbers updated to accommodate new visual tool in this chapter.

Chapter 10 Biological Products

- ToC second page updated with 2018-19 influenza vaccines.
- Non-Publicly funded influenza vaccines information updated.
- 2018-19 FLUZONE and FluZone High Dose product information added.
- Menactra and Menveo
  - ● Beside CSF disorders - removed.
  - Clarification that series is for medically high risk clients only (not Grade 6 program)
- Nimenrix
  - ●Beside CSF disorders - removed.
  - Footnote placement corrected.
  - Scheduling for 6 weeks to < 12 months of age added.
  - Clarification that series is for medically high risk clients only (not Grade 6 program)

- IMOVAX Polio
  - Under Dose/Series:
    - Volume of 0.5 mL added.
    - For dose 4 under section 1, (min. interval 6 months after dose 3) has been added to sentence.
- Td Adsorbed
  - Min. age of 7 years added.
  - Wound management added as first indication.
  - New footnote 1: Refer to Chapter 5, Section 3.7, Tetanus Prophylaxis in Wound Management. Tdap/Tdap-IPV is preferentially recommended for those 7-17 years who are not up to date with polio and/or pertussis vaccines.

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  - Second indication now reads, "For those 7 years and older who are up-to-date for polio and pertussis immunization.
- Adacel and Boostrix
  - (0.5 mL IM) (Min. age 4 years old) added to pages. 0.5 mL removed within text.
  - New Indication: Booster (5th) dose at age 4-6 years (school entry) who have met polio vaccine requirements.
  - Minimum intervals used as these clients are not UTD.
  - Contraindication: Children younger than 4 years old.
  - Added to footnote #1: Tdap/Tdap-IPV is preferentially recommended for those 7-17 years who are not up to date with polio and/or pertussis vaccines.
- Adacel-Polio and Boostrix-Polio
  - (0.5 mL IM) (Min. age 4 years old) added to pages. 0.5 mL removed within text.
  - Indication 2 now reads: Booster (5th) dose at age 4-6 years (school entry).
  - Minimum intervals used as these clients are not UTD.
  - Added to footnote #5: Tdap/Tdap-IPV is preferentially recommended for those 7-17 years who are not up to date with polio and/or pertussis vaccines.
  - Reinforcements: None
- Priorix-tetra, ProQuad, Varilrix (first page) and Varivax III (first page)
  - New additions under Precautions section for the varicella-containing vaccines as per CIG:
    - Systemic antiviral therapy (e.g., acyclovir, valacyclovir, famciclovir) should be avoided for 24 hours after the last dose as it may affect the reproduction of the vaccine virus and may reduce the efficacy of varicella-containing vaccine (CIG).
    - It is recommended that people taking long-term antiviral therapy should discontinue these drugs, if possible, from at least 24 hours before administration of varicella-containing vaccine and should not restart antiviral therapy until 14 days after vaccine administration (CIG).

Chapter 14 Appendices

- Appendix 14.3 Immunization Fact Sheets - Updates
  - Caring for Your Child's Fever – July 2018
  - Tetanus, diphtheria and pertussis - July 2018
  - Removed – Diphtheria, tetanus, pertussis, polio vaccine as vaccine no longer available.
- Select Immunization-Related Letters from the Ministry of Health
  - Diphtheria, Tetanus and Pertussis Vaccines and a Rabies Vaccine Manufactured in China (July 2018)

Government of Saskatchewan
Ministry of Health

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Instructions: Please remove and discard the corresponding pages in each chapter section and insert the amended pages as noted below in each corresponding chapter section dated September 2018.

Chapter 1 – Introduction

- P. 1 Section 1.0 INTRODUCTION and DISCLAIMER for PUBLIC HEALTH NURSES
  - MHO review date updated to 2020-09-30.

Chapter 5 – Immunization Schedules

- P. 7 Section 1.6 Adults 18 Years and Older Who Present for Immunizations
  - Added to footnote #5: Refer to Appendix 5.4 Publicly Funded Varicella Immunization Eligibility and Panorama Directives.
- P. 13 Section 3.3.1 Minimum Spacing between MMRV, MMR and Varicella Vaccine Doses
  - Minimum intervals all changes to 4 weeks, and age recommendations have been removed.

Chapter 7 Special Populations

- Table of Contents second page
  - Title changes for section 6.6 and 6.3. Section 6.5 and 6.5 removed.
- P. 7, P. 13 and P 14 - MenB abbreviation changed to Men-B4C for sections 2.4 Asplenia, 2.13 Sickle Cell Disease and Section 3.0 Immunocompromised Conditions.
- P. 16 section 3.3A: Publicly Funded Vaccines and Immune Globulins – Human Immunodeficiency Virus
  - Pneu-C-13 is own row and revised to show adult eligibility.
- P. 17 Sections 3.4 and 3.5
  - First sentences now read, "Consult with the jurisdictional transplant program coordinating things for the patient and to follow whatever schedule is requested even if their recommendations differ from Saskatchewan guidelines".
- P. 18 Section 3.6
  - First sentence now states, "Consult with the jurisdictional haematology/blood & bone marrow transplant program transplant physician for recommended immunizations".
- Pp. 26-27 Occupation
  - Now there is only 1 section for a new risk factor called Health Care Worker – Eligible for Publicly Funded Vaccines as section 6.2.
  - The title in new section 6.3 has been revised on p. 27 to reflect the RF name change.

Chapter 10 Biological Products

- Updated 2018 product monograph links
  - FLULAVAL TETRA
- Bexsero – abbreviation revised to Men-B4C
- Trumenba – abbreviation revised to MenB bivalent
- Prevnar 13 – Page 2 of 2
  - New noted added: NOTE: 1-year minimum interval is required if Pneu-P-23 is given before Pneu-C-13, and an 8 week interval is required if Pneu-C-13 is given before Pneu-P-23 for all ages. HSCT recipients may be an exception to this recommendation.
  - Lymphoma, Hodgkin's and multiple myeloma removed as there is a category for malignancies/cancer.

Chapter 14 Appendices

- P. 27 Select Immunization-Related Letters from the Ministry of Health
  - New Publicly Funded Vaccine Eligibility – Prevnar 13 for Adults with HIV

Government of Saskatchewan

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Instructions: Please remove and discard the corresponding pages in each chapter section and insert the amended pages as noted below in each corresponding chapter section dated October 2018.

Chapter 5 – Immunization Schedules

- TOC page 2
  - Appendix 5.2 renamed as Publicly Funded MMR Vaccine Eligibility
- P. 5 Section 1.4 Children 1 Year and Older but less than 7 Years Who Present for Immunizations
  - New footnote #11 for MMRV and MMR - Refer to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility.*
- P. 6 Section 1.5 Children 7 to 17 Years Who Present for Immunizations
  - New footnote #14 for MMRV and MMR - Refer to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility.*
- P. 7 Section 1.6 Adults 18 Years and Older Who Present for Immunizations
  - Revised footnote #2 for MMR last sentence - Refer to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility.*
- P. 8 Section 1.7 Recommended Publicly Funded Immunizations for Adults Who Completed a Primary Childhood Vaccine Series
  - Revised MMR sentence - Refer to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility* to assess eligibility.
- P. 9 Section 1.8 Publicly Funded Vaccine Eligibility Criteria
  - Appendix name change for measles and mumps - Refer to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility*.
  - New statements for Rubella:
    - According to CIG, 1 dose of rubella is considered sufficient for immunity in all ages. Refer to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility*.
    - Documented serological non-immune individuals who have documentation of receiving two previous doses of rubella-containing vaccines are ineligible to receive further doses of rubella-containing vaccine; document as a non-responder.
- P. 11 Section 2.1 Minimum Intervals for Specific Vaccine Series
  - Previous #12 footnote pertaining to varicella deleted. Former #13 is now #12.
- P. 21 Section 4.1 Unknown or Uncertain Immunization Status
  - Content update second paragraph - Measles, Mumps, Rubella – see Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility.*
- P. 27 Appendix 5.2: Publicly Funded MMR Vaccine Eligibility (applies to everyone ≥ 1 year old)
  - **Please review this revised algorithm carefully.** As 1 dose of rubella is accepted as immunity by CIG, the content in the #1 and the 3rd, 4th and 5th boxes have been revised.

Chapter 7 Special Populations

- P. 10 Section 2.10A: Recommended Vaccines – Malignancies / Cancer
  - Appendix name for MMR corrected.
- P. 23 Section 5.2.A Publicly Funded Vaccines – Pregnancy
  - Footnote #2 has been revised with reference to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility.*
- P. 27 Section 6.3 Publicly Funded Vaccines Health Care Worker – Eligible for Publicly Funded Vaccines
  - For varicella, measles, mumps and rubella, documentation of immunization is now listed as the first criterion for immunity.
  - Refer to Chapter 5, Appendix 5.2: Publicly Funded MMR Vaccine Eligibility to assess MMR dose eligibility is now stated in the Recommendations column for measles, mumps and rubella.
- P. 41 Appendix 7.8: Publicly Funded Immigrant and Refugee Immunization and Serology Recommendations
  - New title of Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility* noted in table.

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Chapter 8 Administration of Biological Products

- P. 4 Section 1.3.3 Vials
  - #8 now reads: Hold the vial upside down and withdraw all contents to ensure client receives full concentration of antigens.
    - Single dose vial - withdraw all contents to ensure client receives full concentration of antigens.
    - Multidose vial - withdraw the required quantity of biological product into the syringe.
- P. 4 Section 1.3.4 Vaccines with Diluents
  - #2-third bullet now reads: Inject diluent into vaccine vial and gently agitating to thoroughly dissolve the lyophilized powder. Draw up all contents to ensure client receives full concentration of antigens.
- P. 5 Section 1.3.5 Ampoules
  - #5 now reads: Draw up all contents to ensure client receives full concentration of antigens using a sterile syringe and needle. It is not necessary to change needles between drawing up the biological product into the syringe and administering it to the client.

Chapter 10 Biological Products

- Boostrix – ingredients updated.
- MMR vaccines –footnote #1
  - Revised to reflect Ministry letter regarding MMR eligibility for children 6-11 months of age.
- The following sentence has been added to MMR and MMRV vaccines in either the indication section or as a footnote: According to CIG, 1 dose of rubella is considered sufficient for immunity in all ages. Refer to Appendix 5.2: *Publicly Funded MMR Vaccine Eligibility*.
- Prevnar 13 – Page 2 of 2 and Pneumovax 23 page 2 of 2 footnote #3
  - New noted added: NOTE: 1-year minimum interval is required if Pneu-P-23 is given before Pneu-C-13(all ages), and an 8 week interval is required if Pneu-C-13 is given before Pneu-P-23 for all ages. HSCT recipients may be an exception to this recommendation.
- Pneumovax 23
  - Previous footnote #5 is now Footnot#4.

Chapter 14 Appendices

- P. 27 Select Immunization-Related Letters from the Ministry of Health
  - MMR Immunization Questions and Answers Regarding Travelling Infants added.